

## WHAT IS CLAIMED IS:

1. - 21. (canceled)

22. (currently amended) A method for machining workpieces by combining a first machining tool with at least one second machining tool, wherein at least one of the first and second machining tools employs laser radiation, the method comprising the steps of:

operating the first machining tool with a first pulse modulation and the at least one second machining tool with a second pulse modulation; and

synchronizing the first and second pulse modulations of the first machining tool and the at least one second machining tool;

wherein the first and second pulse modulations are in a variably controlled phase relationship relative to one another, wherein the phase relationship is controlled as a function of one or several process parameters and/or as a function of sensor signals.

23. (previously presented) The method according to claim 22, wherein in the step of synchronizing same pulse frequencies are used for the first and second pulse modulations, ~~wherein the first and second pulse modulations are in a fixed or variably controlled phase relationship relative to one another.~~

24. (previously presented) The method according to claim 22, wherein in the step of synchronizing pulse frequencies are used that are an integral multiple relative to one another, ~~wherein the first and second pulse modulations are in a fixed or variably controlled phase relationship relative to one another.~~

25. (previously presented) The method according to claim 22, wherein in the step of synchronizing one of the first and at least one second machining tools is used as a master and the other or others of the first and at least one second machining tools are slaves, wherein pulse control signals of the master are used as a master signal for synchronizing the first and second pulse modulations.

26. (canceled)

27. (canceled)

28. (previously presented) The method according to claim 22, wherein the step of synchronizing is carried out by in-phase synchronization.

29. (previously presented) The method according to claim 22, wherein the step of synchronizing is carried out by antiphase synchronization.

30. (previously presented) The method according to claim 25, wherein a slave pulse in response to the master pulse is generated at the beginning or at the end of the master pulse, or vice versa.

31. (previously presented) The method according to claim 22, further comprising the step of generating individual pulses or pulse packages for the first and second pulse modulations.

32. (previously presented) The method according to claim 25, wherein the master is a machining tool that is optionally not externally controllable.

33. (previously presented) The method according to one claim 25, wherein the master is a machining tool that is internally process-controlled with variable pulse frequency.

34. (previously presented) The method according to claim 22, wherein the at least one second machining tool employs at least one of laser radiation, electric arc radiation, plasma radiation, an energy source, a pulse source, and a particle source.

35. (previously presented) The method according to claim 22, wherein the first and second machining tools are selected from the group consisting of separating tools, material removing tools, joining tools, coating tools, building tools, surface treatment tools, and surface finishing tools, wherein the first and at least one second machining tools are configured such that active areas during machining on or within the workpiece overlap or adjoin one another immediately during the machining process.

36. (previously presented) The method according to claim 35, wherein the first and second machining tools perform machining processes selected from the group consisting of cutting, drilling, material removing, perforating, scoring, engraving, structuring, cleaning, welding, soldering, bonding, coating, generating, selective sintering, rapid prototyping, hardening, refining, alloying, dispersing, polishing, applying lettering, shaping, and bending.

37. (currently amended) A device for hybrid processing of materials by a first machining tool in combination with at least one second machining tool, wherein the

first machining tool employs laser radiation, the device comprising:

a first pulse generator for pulse modulation of the laser radiation of the first machining tool;

a second pulse generator for pulse modulation of the at least one second machining tool;

a synchronizer for synchronous modulation of the first and the at least one second machining tool;

input devices for process parameters;

sensors for process results in the form of sensor signals;

wherein the input devices and the sensors control a phase relationship of the pulse modulations as a function of the process parameters and/or as a function of the sensor signals.

38. (currently amended) The device according to claim 37, further comprising a controller, wherein the first and second pulse generators and the synchronizer are designed to modulate the laser radiation and the at least one additional machining tool with same pulse frequencies, wherein the pulse modulations of the first and second pulse generators are in a ~~fixed~~ or variable phase relationship that is variably controlled by the controller.

39. (currently amended) The device according to claim 37, further comprising a controller, wherein the first and second pulse generators and the synchronizer are designed to modulate the laser radiation and the at least one additional machining tool with pulse frequencies that are an integral multiple relative to one another, wherein the pulse modulations of the first and second pulse generators are in a ~~fixed~~ or variable phase relationship that is variably controlled by the controller.

40. (previously presented) The device according to claim 37, further comprising at least one source for processing pulse control signals generated by the first pulse generator as a master signal for triggering a synchronous control of the modulation of pulse control signals of the second pulse generator in slave operation.

41. (previously presented) The device according to claim 37, further comprising at least one source for processing pulse control signals generated by the

second pulse generator as a master signal for triggering a synchronous control of the modulation of pulse control signals of the first pulse generator in slave operation.

42. (canceled)

43. (previously presented) The device according to claim 37, wherein the synchronizer provides in-phase synchronization.

44. (previously presented) The device according to claim 37, wherein the synchronizer provides antiphase synchronization.

45. (previously presented) The device according to claim 37, wherein the synchronizer generates a slave pulse at the beginning or at the end of the master pulse.

46. (previously presented) The device according to claim 37, wherein the first and second pulse generators generate individual pulses and/or pulse packages.

47. (previously presented) The device according to claim 37, wherein the at least one second machining tool employs at least one of laser radiation, electric arc radiation, plasma radiation, an energy source, a pulse source, and a particle source.